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- Radioactive coal was trucked to the instellation from the Freital mining district. The coal which was dumped was burned and the residues were delivered to the processing plant. Approximately 100 tons of radioactive coal ware somewhat per shift. Radioactive ore arrived at the installation by rail, presumably from Thuringia, Gera, and the eastern Erzgebirge Mountains. Grade 3 and grade 4 ore was delivered; grade 3 ore was of better quality. Grade 2 ore arrived very seldom. Already processed and acid-treated radioactive material arrived from Factory No 96 in sheet metal containers measuring about 150 x 110 x 60 cm. Six such containers were loaded on one 5-ton truck. Approximately 250 tons of ore and pre-treated radioactive material were processed per shift.
- Eastory No 96 in Freital sent 80 to 85 dump cars to subject installation per shift. The load of four of such dump cars could be carried by one truck. Within a 24-hour period, an additional 500 dump car-loads arrived from the Erzgebirge.
- 7. Radioactive coal, after being weighed on the scales, was taken to Zeche No 1 on a conveyor belt. Radioactive one was taken by a scraper to the conveyor belt for radioactive coal and mixed there with the coal at a ratio of 3:1. Every 30 minutes, samples of the radioactive coal and one were tested. No information was known on the U30g content of the ore.
- The ore-coal mixture was sent to the jaw crusher from where it was directed via a shaking sleve to the medium size jaw crusher. From the latter jaw crusher, the material was directed to another shaking sleve from where it went on elevators of Zeche No 2 to an ore storage hunker. From the bunker, the crushed material was dropped into three ball crushers arranged in a row. The material was crushed to a grain size of OOl, and samples were tested every 30 minutes. After water was added to the crushed ore, it was sent to an ore sorting device (Masslerer). The ore which did not have the grain size required was crushed again. The fine-crushed ore was directed into a concrete container where the crushed ore was again tested every 30 minutes. The wet ore powder was taken to six iron wats fitted with stirrers. The vata wers a meters in diameter and 6 meters high, Approximately 600 cubic meters of crushed radioactive material were sent from Zeche No 2 to Zeche No 3 per smift.
- 9. Zeche No 3 consisted of a mixing plant and a pressing plant. The mixing plant was equipped with 60 wooden wats each 3 meters in diameter and 5 meters high. The wats were arranged in three groups, each of them consisting of 20 units. The redicactive mass arriving from Zeche No 2 was first directed to the wooden wats of group No 1. HCl of a specific weight of 1.15 was added to the ore at the rate of 60 to 80 cubic meters per shift depending on the composition of the ore. The mixture was brought to a temperature of 600 C by a system of steam pipes. After the mixture had been acidified, it was pumped to a tower, 25 meters high, from where it was dropped through a pipe to a system of filtering presses. The dropping material reached a pressure of 2.4atmospheres. The pressing plant consisted of 90 presses manufactured at the Magema Firm in Sangerhauson. The presses were arranged in three groups of 30 presses each. The mixture dropped from the tower was first directed to the first group of 30 presses via frame filters and cloth filters. Residues containing low-grade ore were sent to the second group of wooden wats at the mixing plant. Acid was again added to this ore, and the material was then again pumped to the tower from which it was subsequently directed to the second group of presses. Ore residues obtained at the second group of presses were again sent to the mixing plant and pressing plant. The residues obtained at the third section of the pressing plant were dumped as sterile material. A total of 375 cubic meters of ore was processed in the pressing plant per
- 10. The filtrate obtained at Zecha No 3 was pumped to 16 wooden settling tubs, each 4 meters in diameter and 6 meters high, After the filtrate had settled, it was pumped to the precipitation plant where lye solution of lime and caustic soda lye was added in the amount of 40 and 40 to 50 cubic meters respectively per shift. The concentrate was pumped to a second tower, 24 meters high, from where it was directed to 63 Nagema presses. After the

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filtrate had been added to the ore concentrates, it was sent from Zoche No 3 to Zeche No 5. A total of 105 to 150 cubic meters of concentrate was sent to Zeche No 5 per shift.

- 11. Zeche No 5 was a mixing plant equipped with 30 wooden vats arranged in three groups. The vats were about eight meters high. The ore concentrate was heated in them to a temperature of 70° C. In the first group of vats, soda lye was added to the concentrate. Subsequently the material was directed via the tower to the same 60 presses of Zeche No 5 which were also arranged in three groups. The processing of the material was performed in a way similar to that of Zeche No 3. The pre-treated one dispatched by Factory No 96 in Freital arrived at Zeche No 5 via storage bunkers and mixing vats. Filtrate was added to the material in the mixing vats. The material obtained was added to the processed one delivered by Factory No 95. From 60 to 100 cubic meters of one concentrate were processed per shift. By-products were returned to Zeche No 5a. Previously, these by-products were dumped and then treated in 30 presses and heated. Details were not available.
- 12. Zeche No 6 also was a mixing plant. It was equipped with an undetermined number of wooden vats. From 4 to 6 cubic meters of H2SO4 were added to the filtrate in the wooden vats per shift, and the mixture was heated. A mixture of 1 cubic meter of soda lye and 6 cubic meters of limewater was also added. The concentrate was pumped through 10 to 15 presses to a tower from where it was taken on plates to drying ovens. The dried concentrate was packed in cylindrical containers, 40 cm in diameter and 60 to 70 cm high. The filled containers were sealed. The containers were loaded on railroad cars which were dispatched to Erest-Litovsk under heavy Soviet escert.
- 13. The end-product obtained at Zeche No 6 was packed in clay jars, about 30 cm in diameter and 40 to 50 cm high. Twenty to 25 of these jers were put in a box and these boxes were shipped cut by truck at night. From 400 to 500 clay jars were dispatched every night.

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